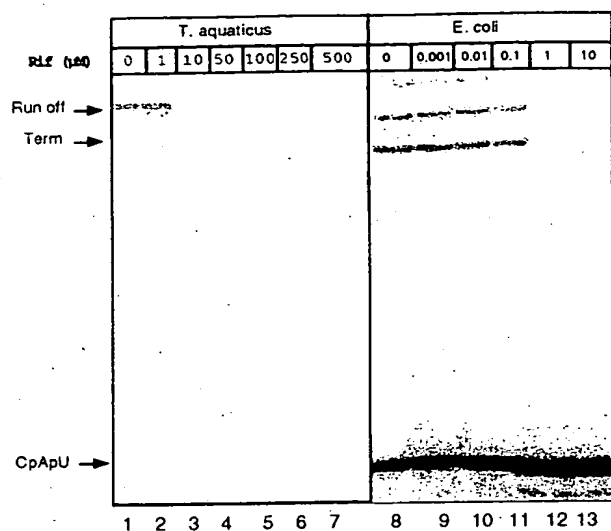
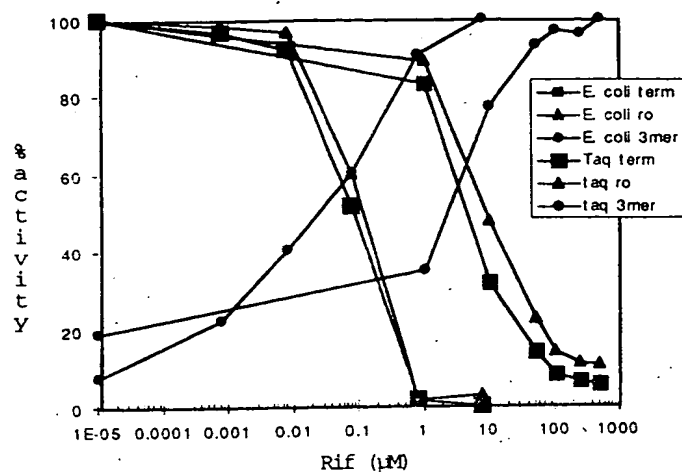


a**b****c**

| Pol | E. coli holo | | | | | | | | | Taq holo | | | | | | | | |
|---|--------------|---|---|---|---|---|---|----|--|----------|---|---|---|---|---|---|----|--|
| Rif-(CH ₂) _n -ATP n= | 0 | 2 | 3 | 4 | 5 | 6 | 8 | 12 | | 0 | 2 | 3 | 4 | 5 | 6 | 8 | 12 | |

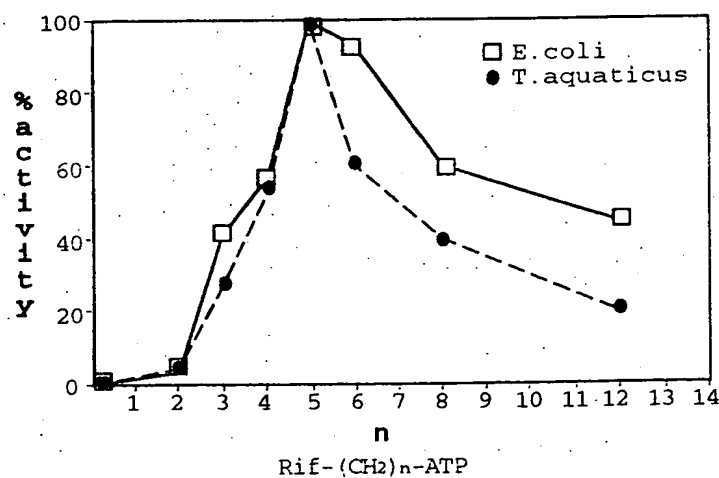
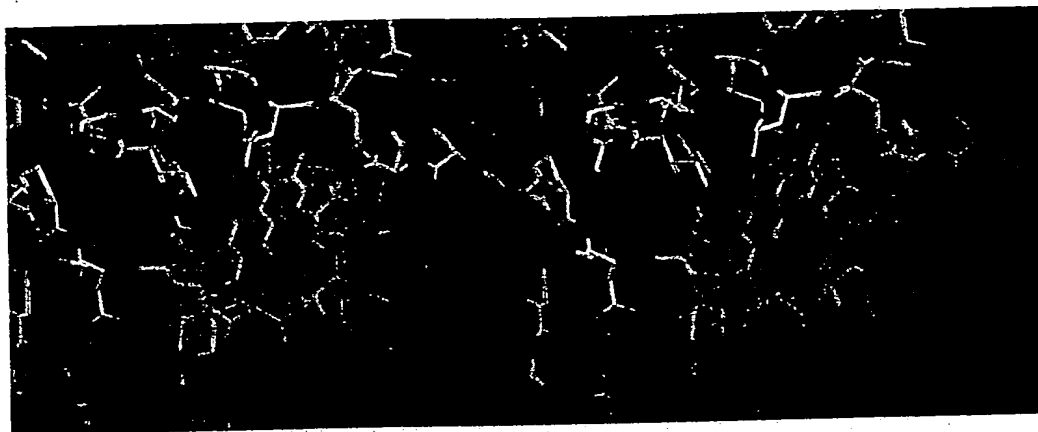
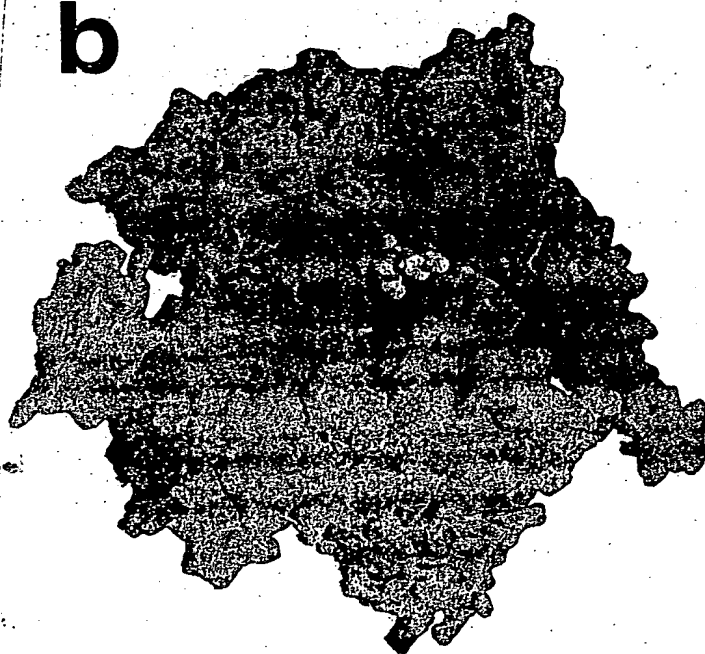
Rif-(CH₂)_n-Ap*UTP**d**

Figure 2

a



b



c

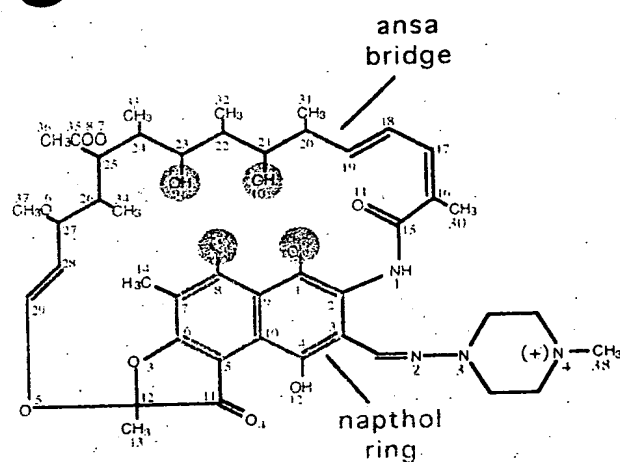


Figure 3

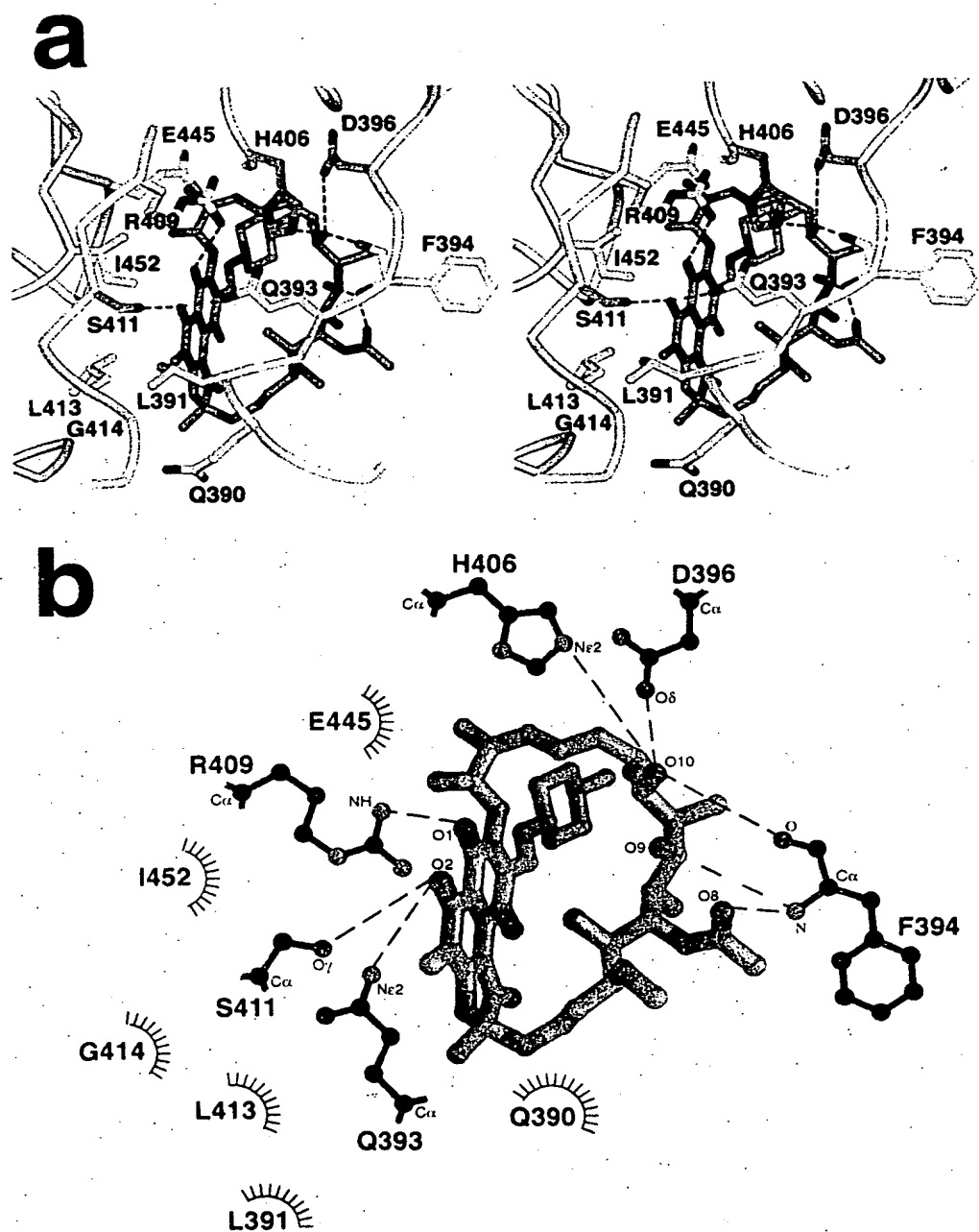


Figure 4

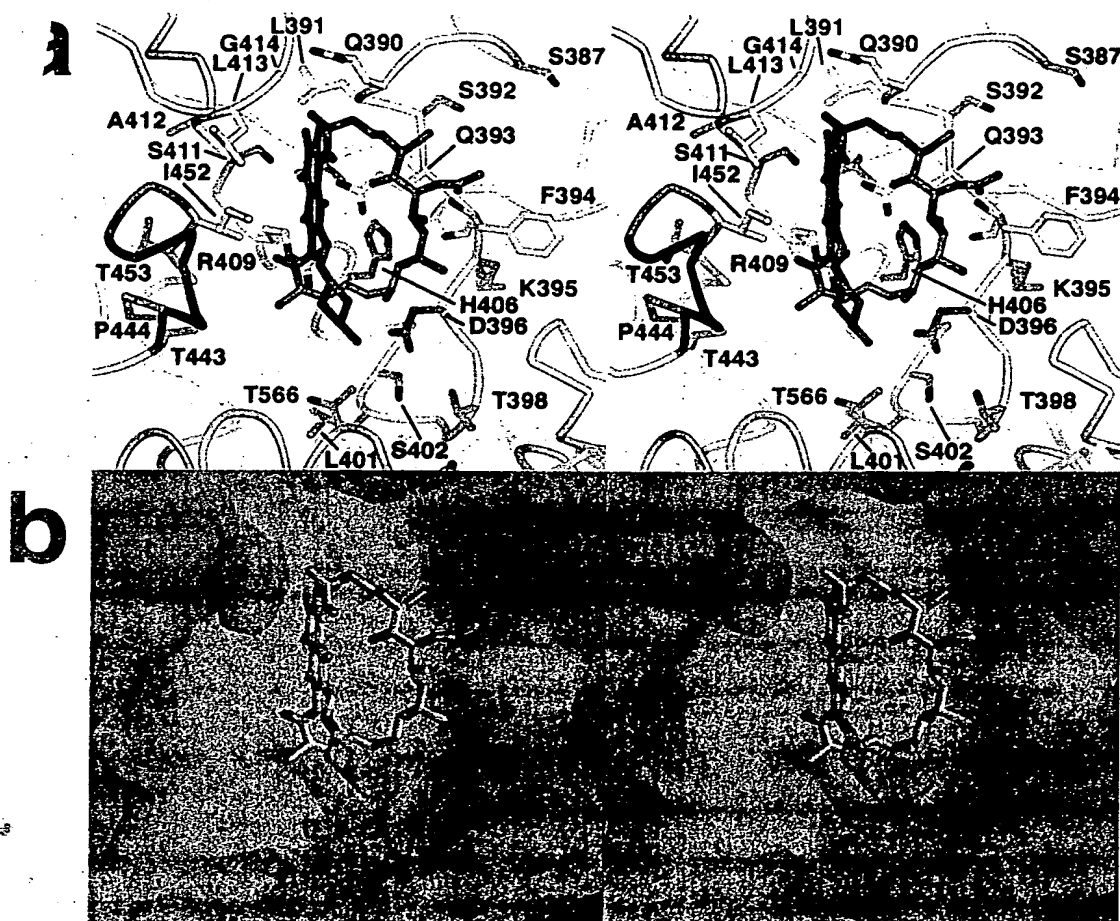
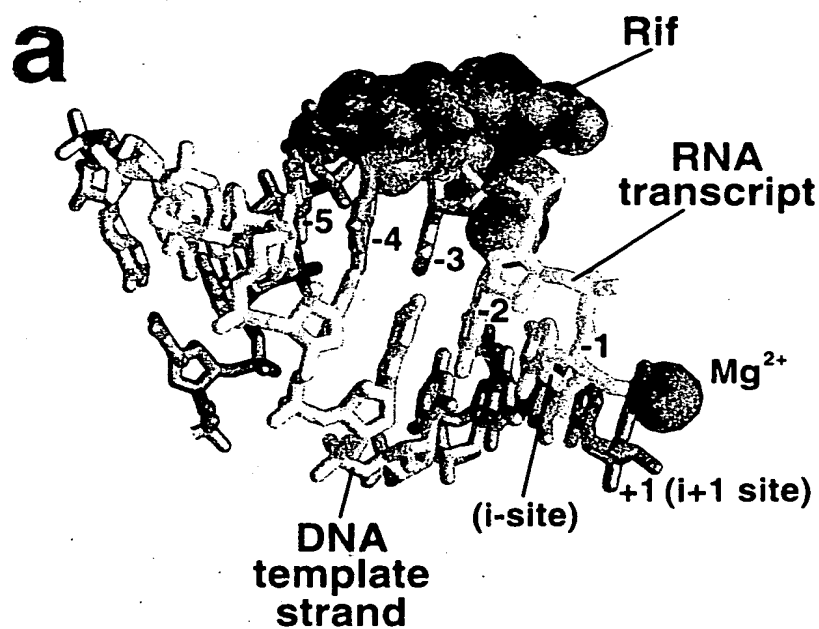


Figure 5

**b**

Minimal scaffold

7 6 5 4 3
RNA 5'AAAUCGC3'
 ATTTAGCGGCTGTTAAAGT5' T DNA
 ACAATTTC A3' NT

| E.coli Pol | | | | | | | | | | | | | | | |
|----------------------|---|---|---|---|---|----------------------|---|---|---|----|----------------------|----|----|----|----|
| +Rif | | | | | | Scaffold RNA=X nt | | | | | Scaffold RNA=X nt | | | | |
| Scaffold RNA=X nt | | | | | | +Rif | | | | | -Rif | | | | |
| X= | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| | | | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |






| Taq Pol | | | | | | | | | | | | | | | | |
|----------------------|----|----|----|----|---|----|----|----|----|---|----|---|---|----|---|--|
| +Rif | | | | | Scaffold RNA=X nt | | | | | Scaffold RNA=X nt | | | | | | |
| Scaffold RNA=X nt | | | | | +Rif | | | | | -Rif | | | | | | |
| X= | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | |
| | | | | |  | | | | |  | | | | |  | |
| | | | | | | | | | | | |  |  | | | |
| | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | |

Figure 6

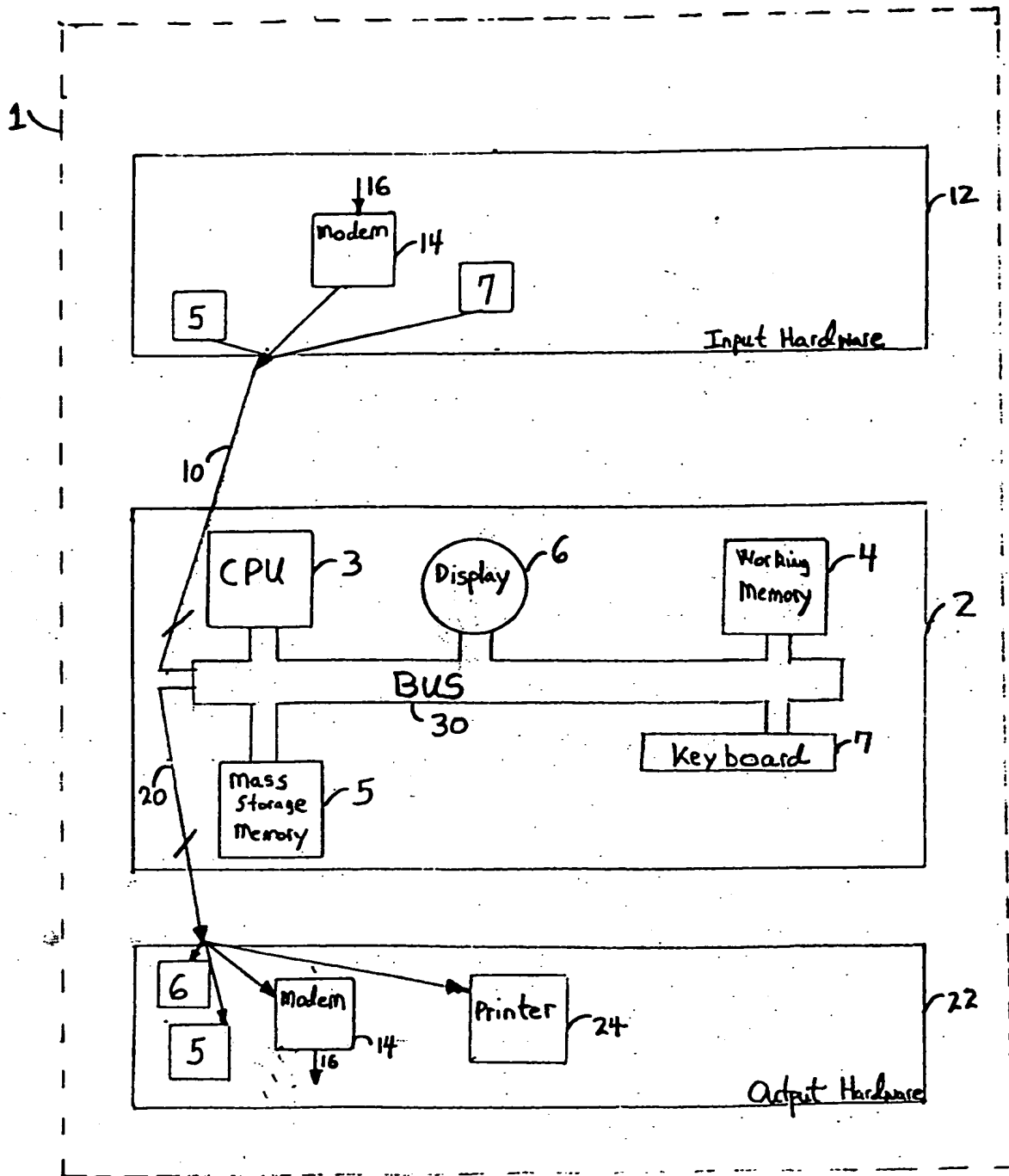


Figure 7